REMARKS

By this Amendment, pending claims 1 through 9 have been cancelled and new claims 10 through 14 have been added. Through these changes, the objections to the drawings and claims and the rejection under 35 USC 112 have been obviated. Claims 10 through 14 are presented to conform with the present invention as distinguished over the prior art applied in the aforementioned Official Action.

Before turning in detail to the claims, it is believed that a short discussion of the nature and purpose of the present invention is in order. The present invention is directed to a system including a steel web joist and a seismic adapter associated therewith. A steel web joist is a structure which is typically prefabricated and located in place before attachment of a seismic adapter. Consequently, the seismic adapter must address conditions in which the preassembled web joist is found. The device must be inexpensive to manufacture and also must accommodate a substantial degree of variation resulting from tolerances in web joist construction. Finally, the seismic adapter must tightly interact with the web joist to insure that there will be no failure or slippage responsive to an earthquake.

Certain features are presented to accomplish the foregoing requirements and purposes. In the claims, the web joist is recited. Further, an anchor plate is recited in association with the two angle elements of the joist. Finally, an engagement plate is defined in greater detail, including specific novelties over the applied references. These novelties provide specific advantages in the application of the seismic adapter to the joist with easily achieved rigidity.

In claim 10, the tongues and shoulders of the distal edges are defined more

precisely with each tongue being tapered inwardly toward the distal extent thereof and each set of shoulders diverging from one another at less than a straight angle toward the distal extents thereof. These features create stability in the seismic adapter associated with the web joist. Further, the angled aspects of the surfaces involved on the distal edges operate to align the first legs relative to the engagement plate and allow for a full seating of each upstanding engagement portion with the two first legs. Thus, as the anchor plate and engagement plate are drawn together, a complete stabilizing of the seismic adapter against movement transverse to the web joist is achieved. This achievement is substantially independent of the leg thicknesses of the angle elements and the width of the cord space.

In claim 13, each upstanding engagement portion is said to be at an obtuse angle to the flat anchor portion. This configuration of inclined portions provides specific advantage in creating some degree of flexibility relative to the joist as the seismic adapter is drawn into a locking arrangement. There are at least four points of contact between the engagement plate and the second legs. Without some flexibility, three of the four points may define an engagement plane with engagement not realized at the fourth point. Through such flexibility obtained by the obtuse angle of these upstanding engagement portions, a stable four point engagement can be achieved. Further, the engagement plate including such obtuse portions will create additional resistance to seismic loads. The obtuse portion engages the corner between the plate top surface and the plate edge surface in compressed contact with the second legs. A higher contact pressure is achieved because of the obtuse angle rotating the portion so that the corner will engage the legs. Further, the structure of the upstanding engagement

portion is more directly aligned with the line of force in lateral seismic responses than would be a flange at a right angle to the anchor portion. Thus, substantial advantage is created in the strengthening and the ability to accommodate alignments provided by the obtuse angles of the upstanding engagement portions. Claim 11 also combines this feature with the novel subject matter of claim 10.

The details of dependent claims 12 and 14 provide advantage in the placement of the anchor plate on a joist which has already been installed. A very small profile can be provided by the side view of the device as described such that it can be easily slid into position atop a joist regardless of the amount of room available with the joist *in situ*.

Turning then to the applied references, applicant acknowledges the description of the prior art referenced in the Information Disclosure Statement as applied in this rejection. The described prior art also lacks the features provided by the unique engagement plate as defined in the several claims, as is recognized in the Official Action. The Koyama and Steinke patents also do not teach or in any way suggest a tongue and shoulders defined as recited in claim 10 or obtusely oriented portions as defined in claims 11 and 13. The functions and advantages recited above in a discussion of these features simply are not realized by the disclosed structures. The Official Action did not contend that they were.

Turning to the standard applicable to this issue of patentability, the *MPEP* defines the requirements for a *prima facie* case 35 U.S.C. 103 at § 2142:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must

> be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicants disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The applied prior art does not meet this standard for a *prima facia* case of obviousness.

The applied references and information, taken independently or in combination, do not "teach or suggest all the claim limitations." Specifically missing are the distal edges and the obtuse upstanding engagement portions. Each of new claims 10 through 14 includes one or both of these specifically recited features. These features have functional significance as detailed above. With this principal requirement of the standard lacking, a *prima facie* case cannot be supported.

A second principal requirement of the standard is also missing. The admitted prior art of the Information Disclosure Statement and the devices of Koyama and Steinke are incompatible and not suggested. The recited seismic adapter of the prior art contemplates a similar, but inferior general function to that of the present invention. Koyama teaches a mechanism for creating a strengthened double beam. Clearly the mechanism of Koyama cannot be added to the beam *in situ*. It also has no ability to accommodate wide tolerances in an assembled system. The features of Koyama do not accommodate diverse structures. Rather, the device of Koyama defines the structures through the roll of this device in locking angle irons together. Consequently, the device of Koyama provides features which are incompatible with either the admitted prior art seismic adapter or the adapter of the present application. As the fixtures of the admitted prior art and Koyama are incompatible and are not even employed in the same

environment, there is no suggestion or motivation to one of ordinary skill in the art to combine these teachings.

Steinke teaches that it is advantageous to crimp elements to insure an appropriate fit. Reference is made to the relevant section in the Official Action (Col. 5, ll. 6-10). However, this is not a mechanism employed in the present application. Consequently, it does not specifically appear relevant to the present issues. Further, Steinke teaches a system which is anchoring frame members of a structure. The device does not teach the structure of a seismic adapter capable of assembly with a joist, not to hold the joist together, but rather to provide a mounting support for suspended elements. Thus, Steinke also is nonanalogous to the admitted prior art of the Information Disclosure Statement and there is no suggestion, teaching or motivation for a combination with the seismic adapter of the prior art.

In view of the foregoing, it is believed that the newly presented claims 10 through 14 provide novel features and combinations which have not been defined by the prior art. The prior art is diverse in its utility and inconsistent as to utility and structural integration. Therefore, it is believed that the present claims are properly formed and distinguishable over the prior art. A Notice of Allowance is earnestly solicited.

Respectfully submitted,

FULBRIGHT & JAWORSKI L.L.P.

By: _____
John D. McConaghy
Reg. No. 26,773

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865 South Figueroa Street, 29th Floor
Los Angeles, CA 90017-2576
(213) 892-9200